

II. AMENDMENTS TO THE SPECIFICATION

- Please delete the sentence abridging lines 8 – 10 on page 7 of the specification as submitted, to replace the paragraph after line 3 on page 7 of the specification with the following amended paragraph:

The pits and lands are typically coated with a reflective layer 240 of, for example, aluminum, which is then coated by a protective layer 235, typically acrylic. If desired, the acrylic layer may be covered by a label, 250. In operation, the light beam 30, typically at a wavelength of 780 nm, passes through the surface of the surface of the polycarbonate substrate 210 where it becomes more sharply focused due to the high refractive index of the polycarbonate. ~~The high refractive index may also alter the wavelength of the light, for example, from 780 nm (infrared) to about 500 nm (green).~~ The beam is focused on the reflective surface 240 where it is highly reflected by the lands 230, and less directly reflected, or scattered, by pits 220. The pits are typically formed at a height of about $\frac{1}{4}$ of the wavelength of the light passing through the polycarbonate. Thus, light that is reflected from a land travels about $\frac{1}{2}$ wavelength farther than light that is reflected from a pit, resulting in light reflected from a pit being out of phase with light reflected from a land. The two waves will therefore cancel each other, resulting in no light being reflected back to the detector.